FIG.1

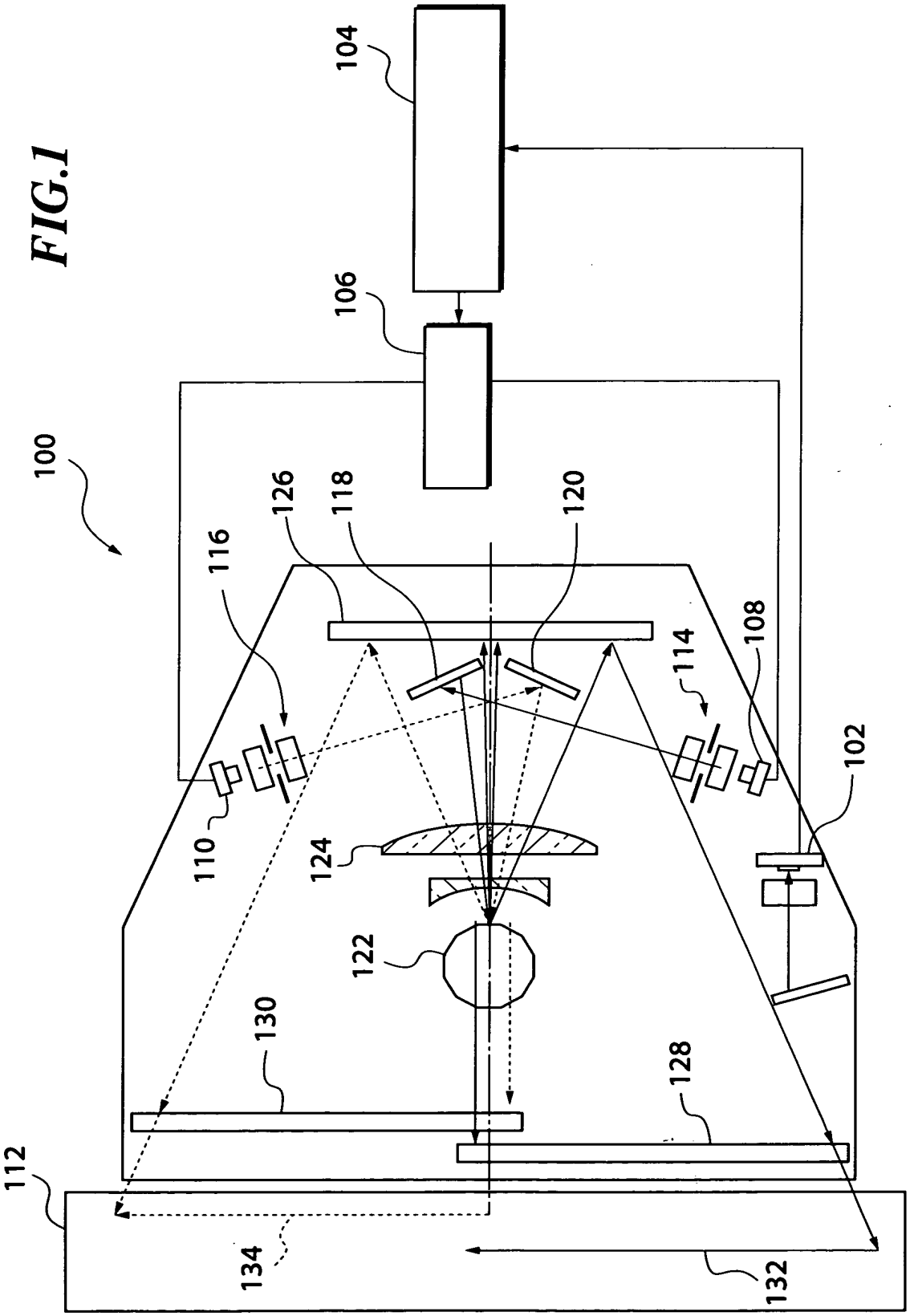

104
106
100
126
118
120
116
108
114
102
110
124
122
130
128
112
134
132

FIG.2

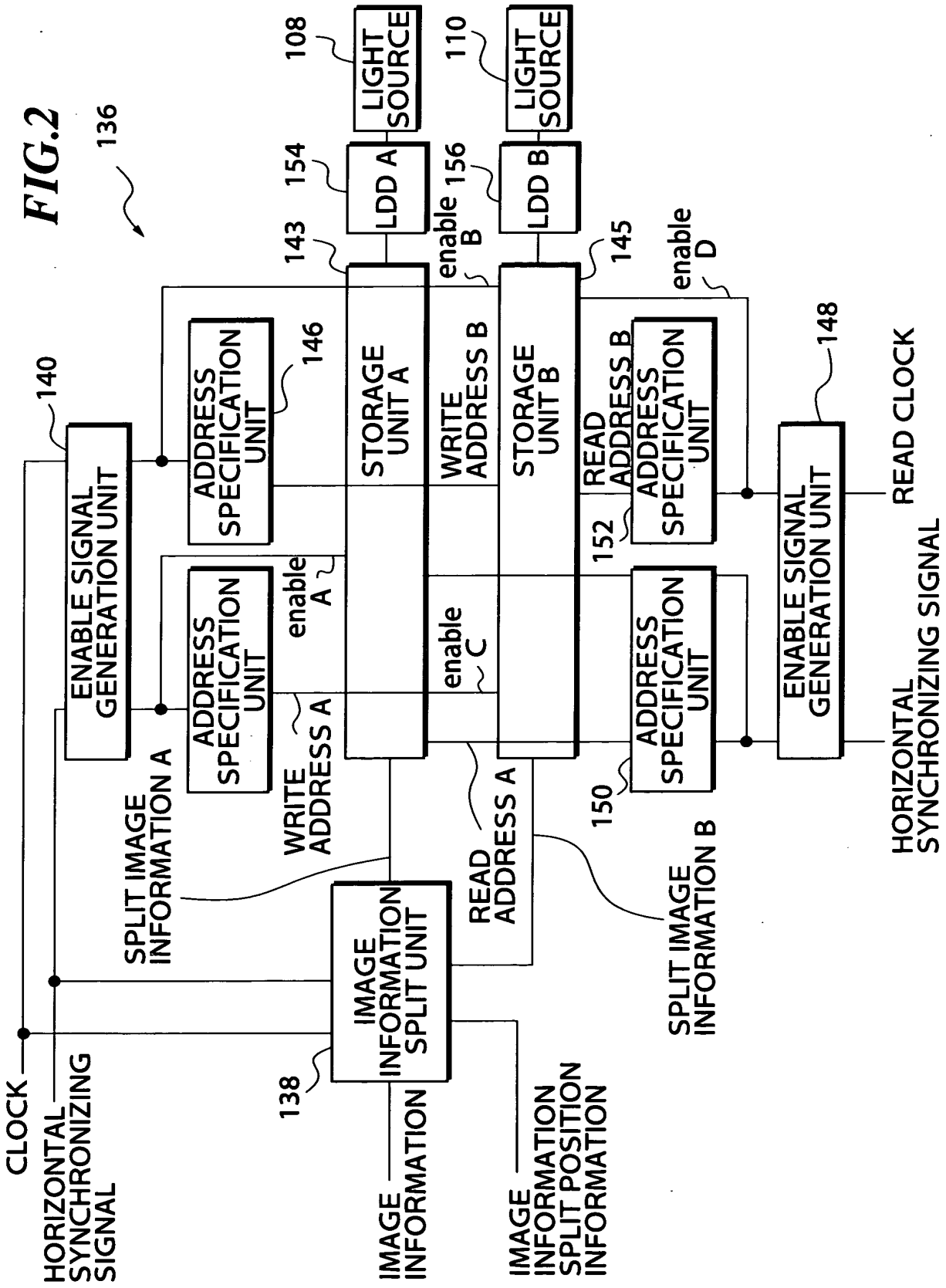

136
108
LIGHT SOURCE
110
LIGHT SOURCE
154
LDD A
156
LDD B
143
145
enable B
enable D
140
ENABLE SIGNAL GENERATION UNIT
ADDRESS SPECIFICATION UNIT
146
STORAGE UNIT A
WRITE ADDRESS B
STORAGE UNIT B
READ ADDRESS B
ADDRESS SPECIFICATION UNIT
152
148
ENABLE SIGNAL GENERATION UNIT
READ CLOCK
enable A
enable C
WRITE ADDRESS A
SPLIT IMAGE INFORMATION A
READ ADDRESS A
150
SPLIT IMAGE INFORMATION B
HORIZONTAL SYNCHRONIZING SIGNAL
CLOCK
HORIZONTAL SYNCHRONIZING SIGNAL
138
IMAGE INFORMATION SPLIT UNIT
IMAGE INFORMATION
IMAGE INFORMATION SPLIT POSITION INFORMATION

FIG.3

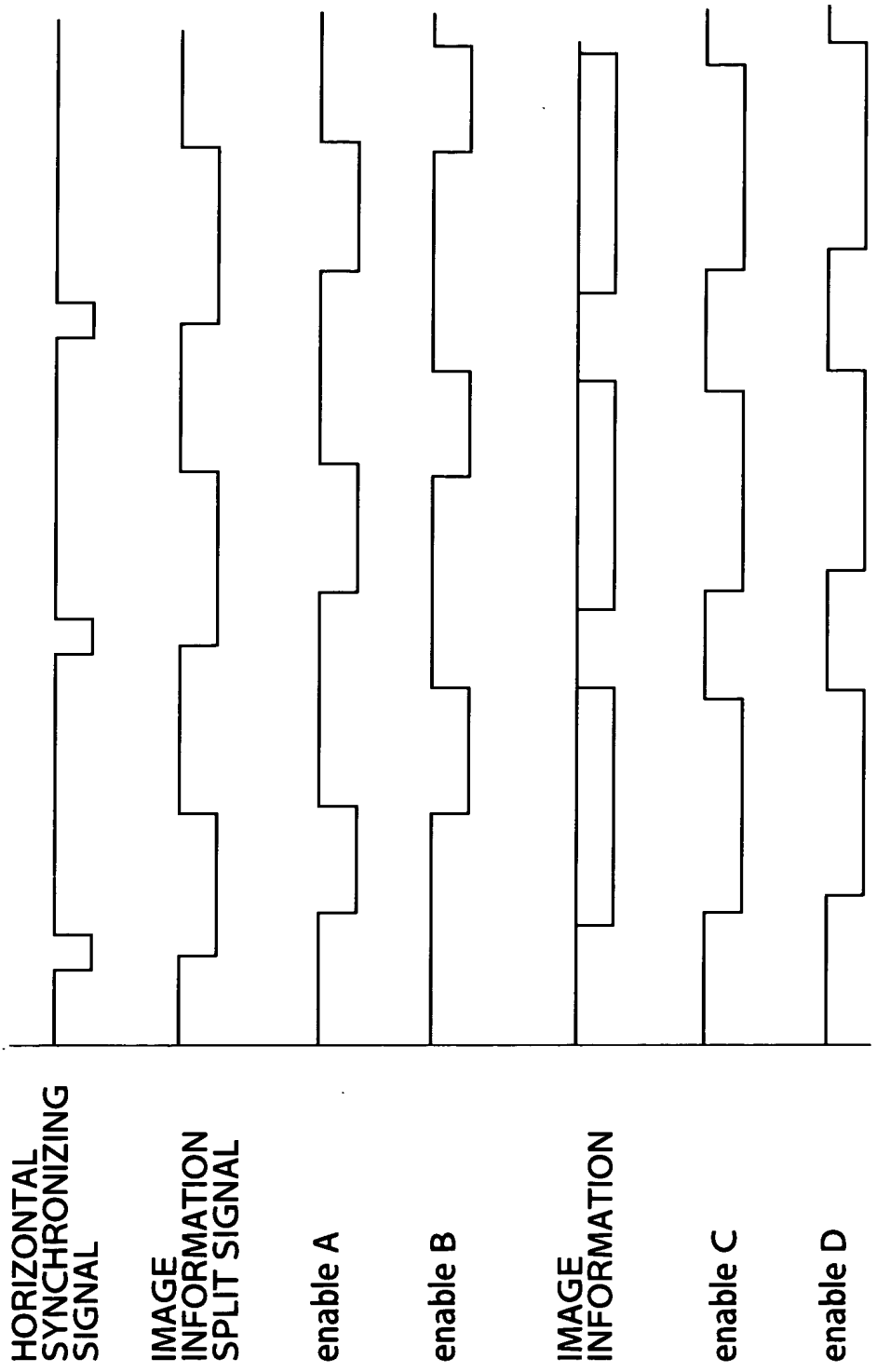

HORIZONTAL SYNCHRONIZING SIGNAL
IMAGE INFORMATION SPLIT SIGNAL
enable A
enable B
IMAGE INFORMATION
enable C
enable D

FIG.4

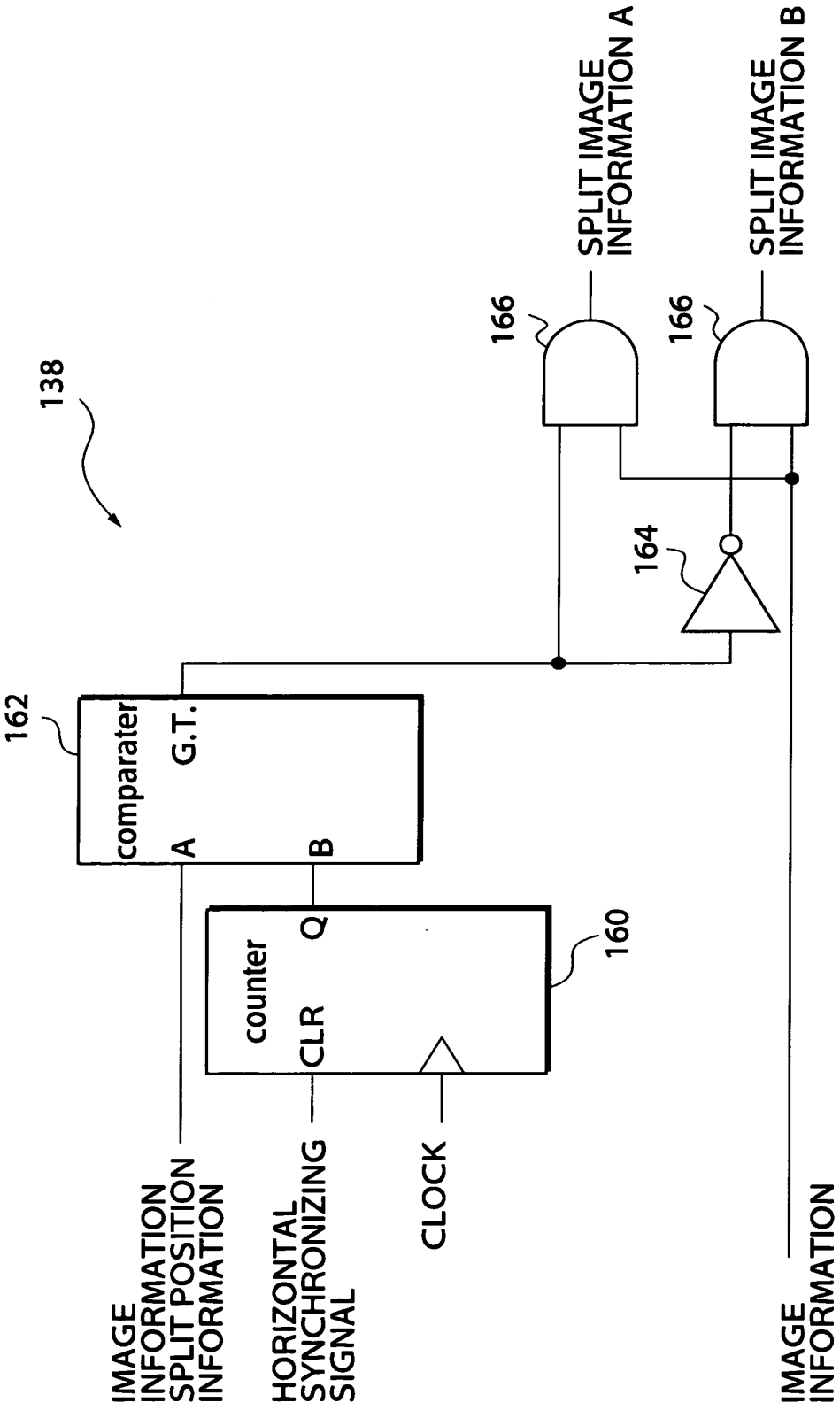

138
166
166
SPLIT IMAGE INFORMATION A
SPLIT IMAGE INFORMATION B
164
162
comparater
G.T.
A
B
counter
Q
CLR
160
IMAGE INFORMATION SPLIT POSITION INFORMATION
HORIZONTAL SYNCHRONIZING SIGNAL
CLOCK
IMAGE INFORMATION

FIG.5

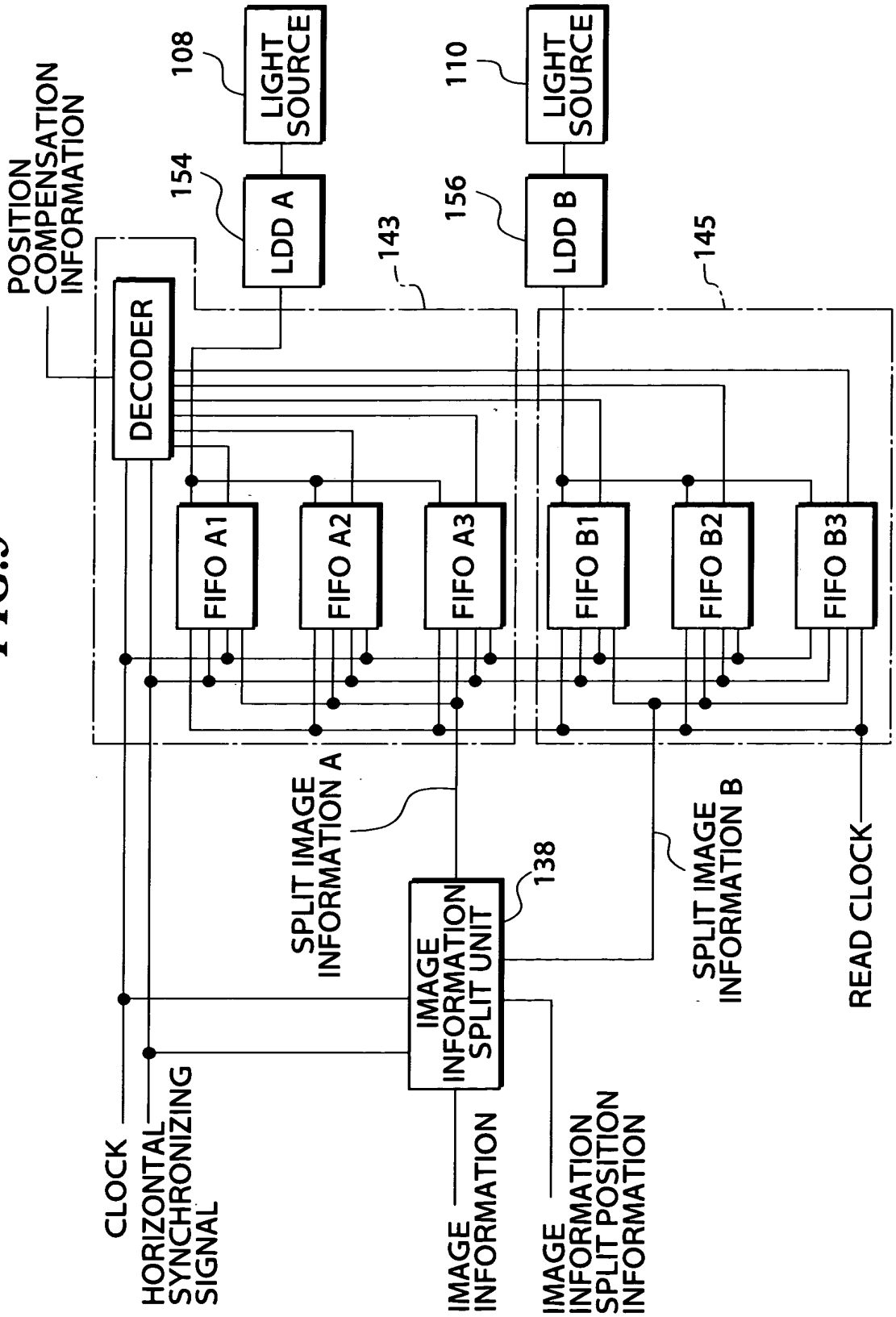

POSITION COMPENSATION INFORMATION
DECODER
108
LIGHT SOURCE
110
LIGHT SOURCE
154
LDD A
156
LDD B
143
145
FIFO A1
FIFO A2
FIFO A3
FIFO B1
FIFO B2
FIFO B3
SPLIT IMAGE INFORMATION A
SPLIT IMAGE INFORMATION B
READ CLOCK
138
IMAGE INFORMATION SPLIT UNIT
CLOCK
HORIZONTAL SYNCHRONIZING SIGNAL
IMAGE INFORMATION
IMAGE INFORMATION SPLIT POSITION INFORMATION

FIG.6

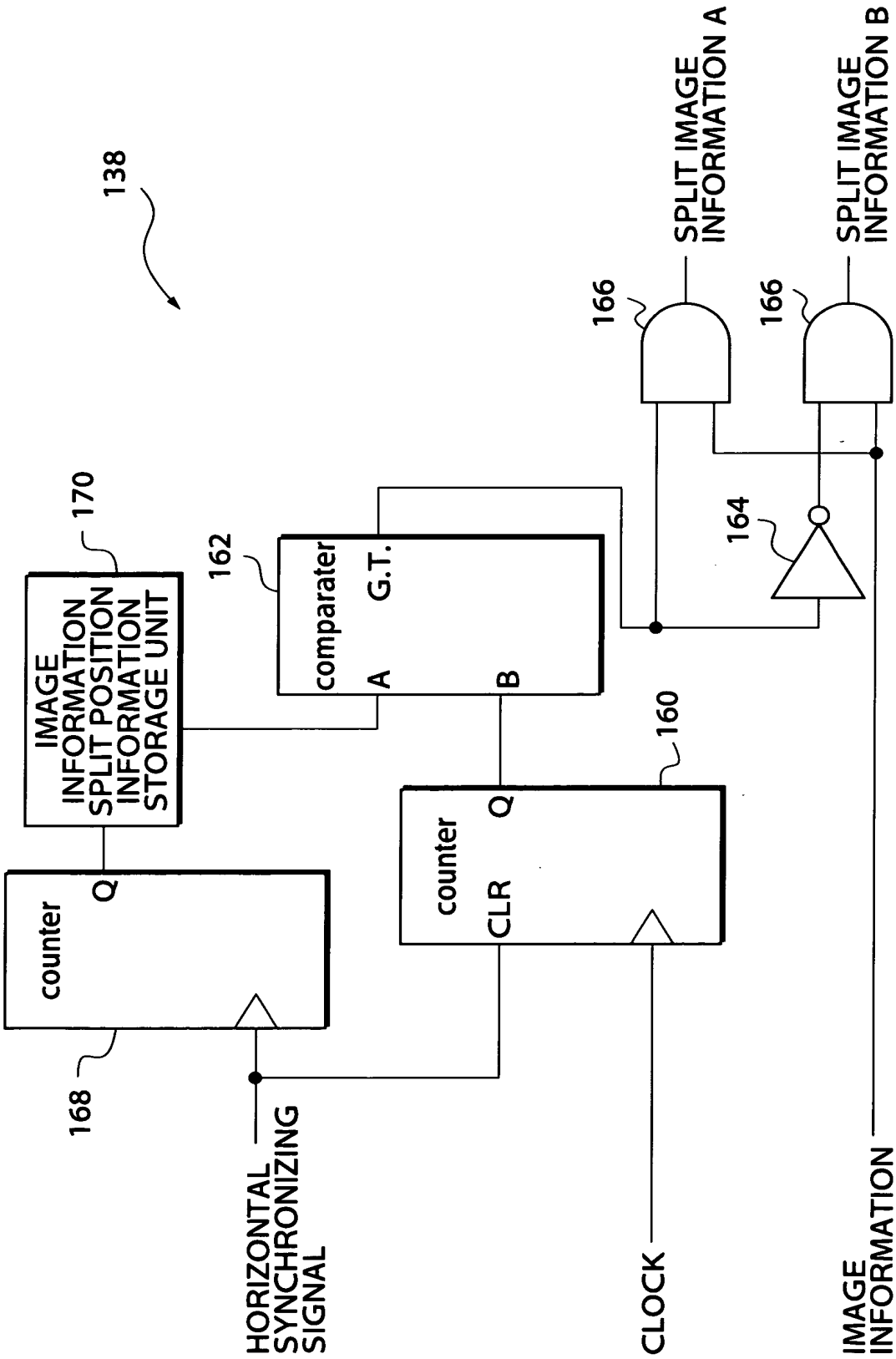
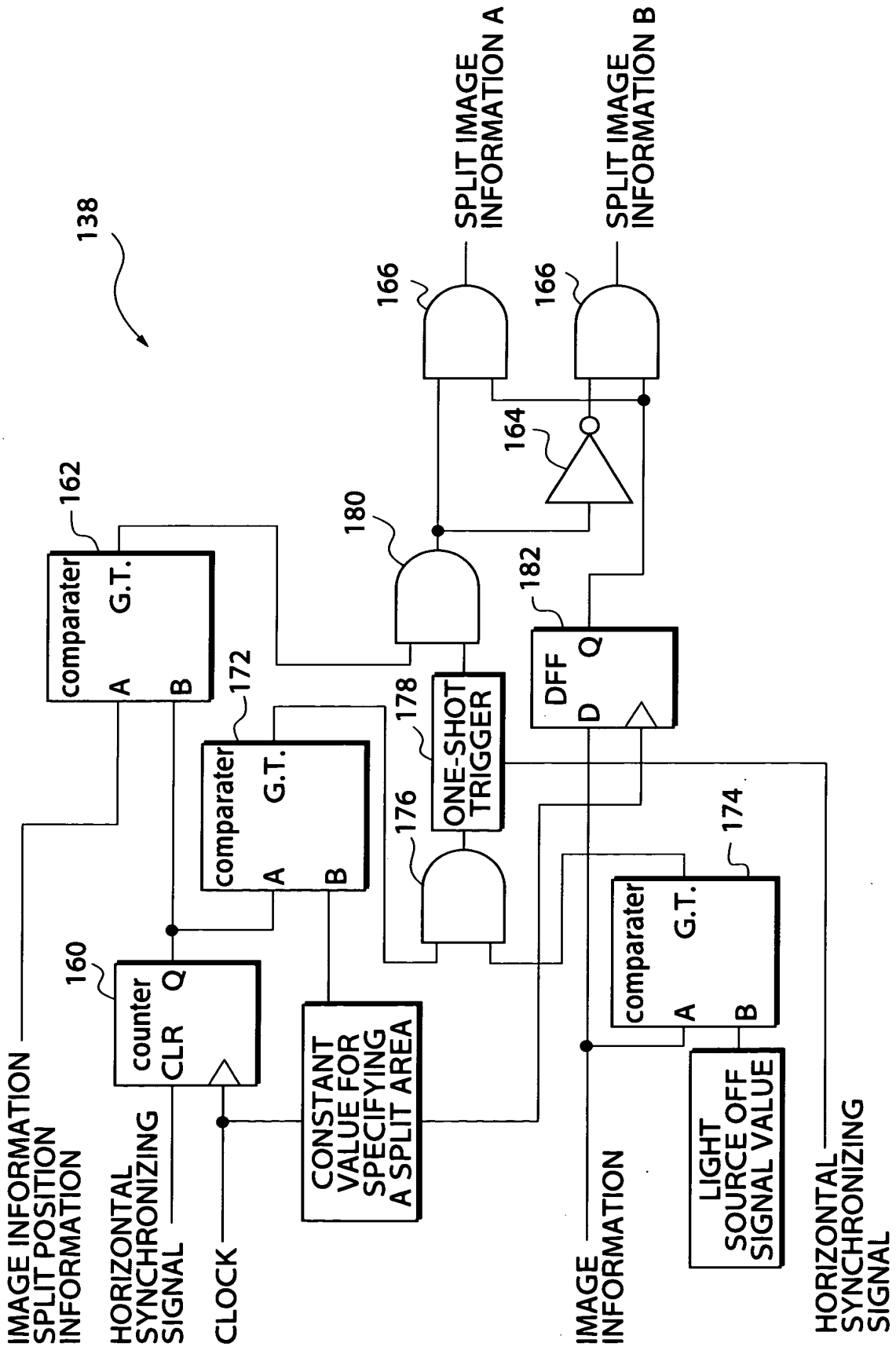

138
170
IMAGE INFORMATION SPLIT POSITION INFORMATION STORAGE UNIT
162
comparater
G.T.
A
B
160
counter
Q
CLR
counter
Q
168
HORIZONTAL SYNCHRONIZING SIGNAL
CLOCK
164
166
166
SPLIT IMAGE INFORMATION A
SPLIT IMAGE INFORMATION B
IMAGE INFORMATION

FIG.7


138
SPLIT IMAGE INFORMATION A
SPLIT IMAGE INFORMATION B
166
166
164
180
182
162
comparater
G.T.
A
B
172
comparater
G.T.
A
B
178
ONE-SHOT TRIGGER
DFF
D
Q
176
160
counter
CLR
Q
174
comparater
G.T.
A
B
IMAGE INFORMATION SPLIT POSITION INFORMATION
HORIZONTAL SYNCHRONIZING SIGNAL
CLOCK
CONSTANT VALUE FOR SPECIFYING A SPLIT AREA
IMAGE INFORMATION
LIGHT SOURCE OFF SIGNAL VALUE
HORIZONTAL SYNCHRONIZING SIGNAL

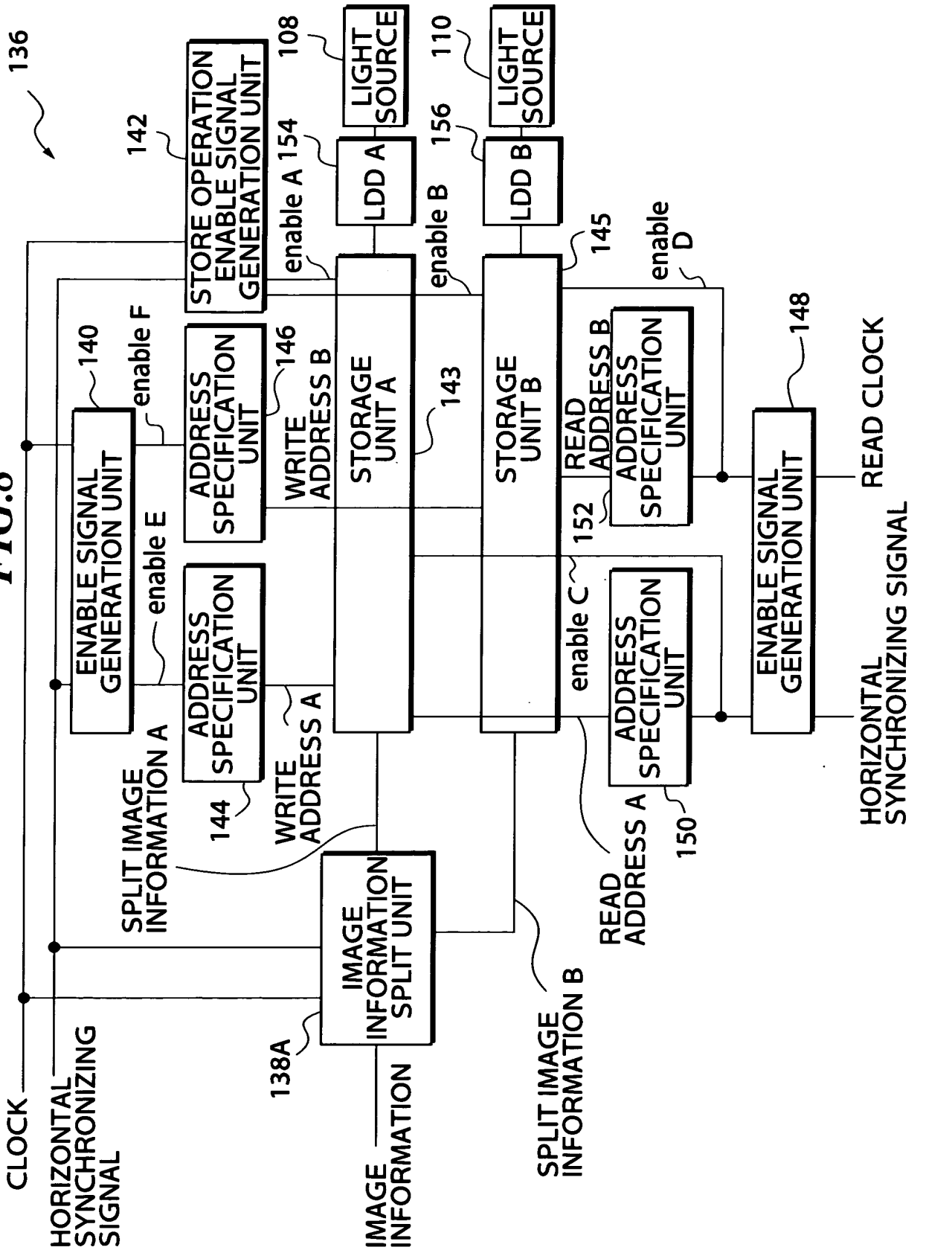

136
142
STORE OPERATION ENABLE SIGNAL GENERATION UNIT
108
LIGHT SOURCE
110
LIGHT SOURCE
154
LDD A
156
LDD B
enable A
enable B
145
enable D
140
ENABLE SIGNAL GENERATION UNIT
enable F
ADDRESS SPECIFICATION UNIT
146
WRITE ADDRESS B
STORAGE UNIT A
143
STORAGE UNIT B
READ ADDRESS B
ADDRESS SPECIFICATION UNIT
148
ENABLE SIGNAL GENERATION UNIT
READ CLOCK
enable E
ADDRESS SPECIFICATION UNIT
152
enable C
ADDRESS SPECIFICATION UNIT
SPLIT IMAGE INFORMATION A
144
WRITE ADDRESS A
IMAGE INFORMATION SPLIT UNIT
READ ADDRESS A
150
HORIZONTAL SYNCHRONIZING SIGNAL
CLOCK
HORIZONTAL SYNCHRONIZING SIGNAL
138A
IMAGE INFORMATION
SPLIT IMAGE INFORMATION B

FIG.8

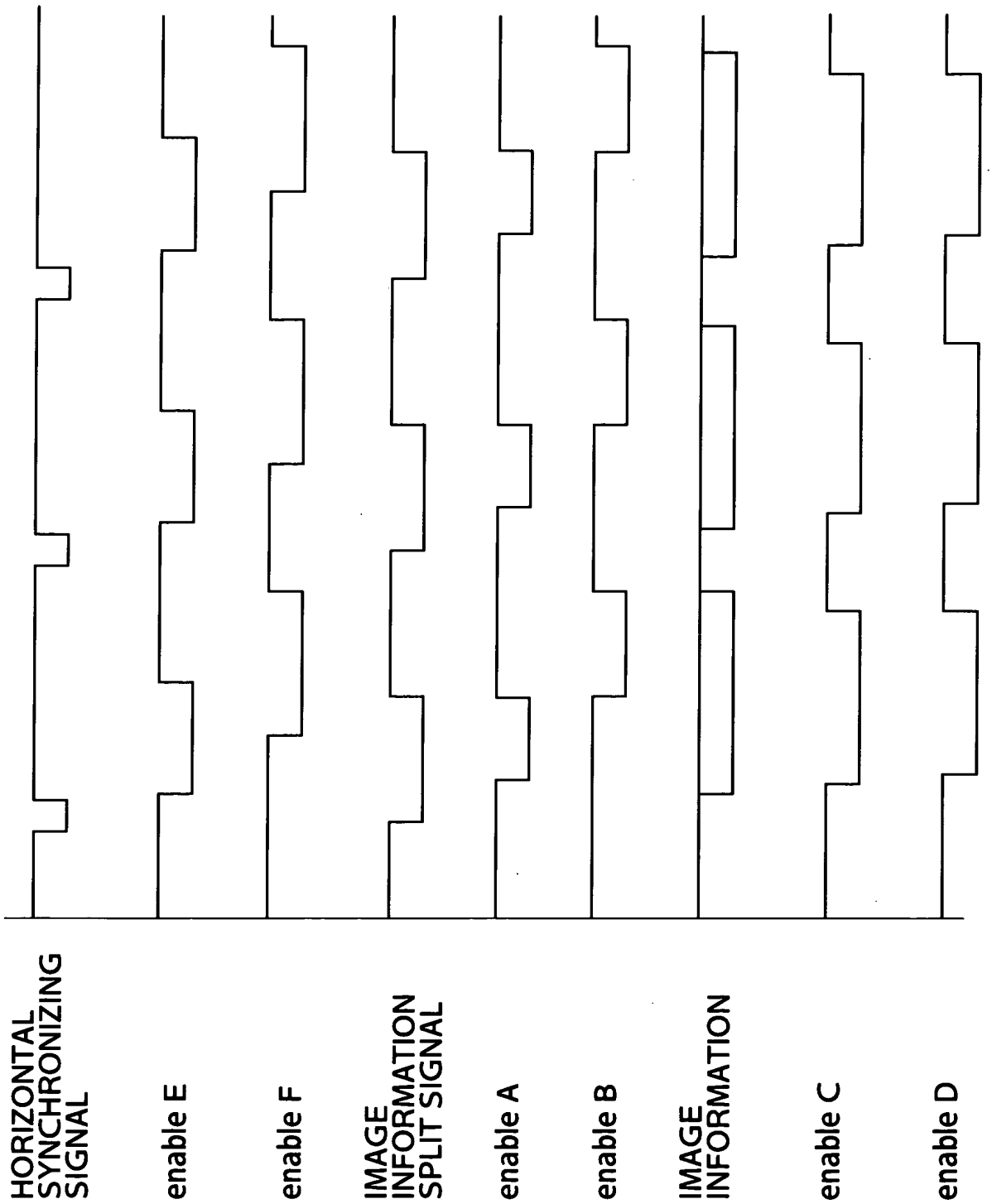

HORIZONTAL SYNCHRONIZING SIGNAL
enable E
enable F
IMAGE INFORMATION SPLIT SIGNAL
enable A
enable B
IMAGE INFORMATION
enable C
enable D

FIG.9

FIG.10A

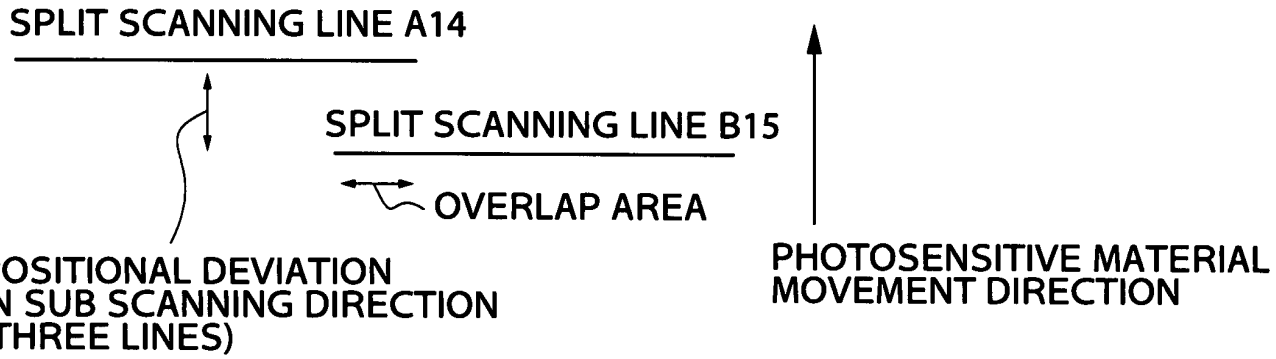
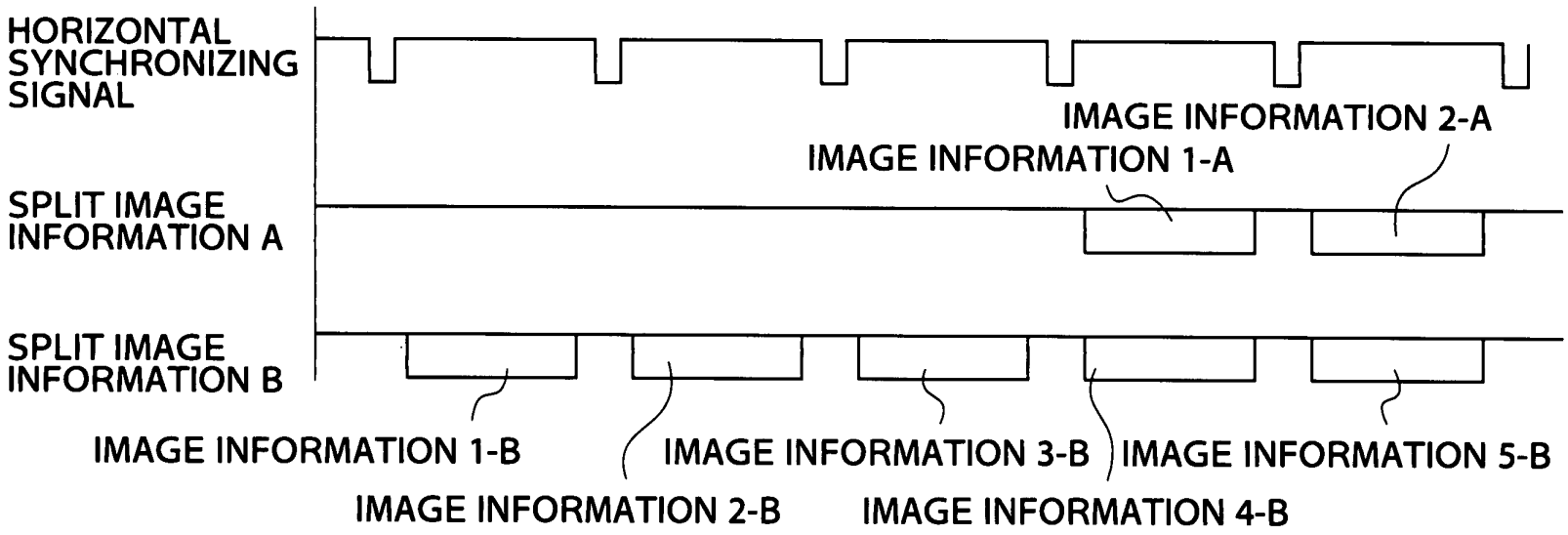



FIG.10B